

April 13, 2021

Los Angeles Department of Water & Power  
Attn: Benjamin Wong  
111 N. Hope Street, Room 308  
Los Angeles, CA 90012

*Submitted via email to: uwmp@ladwp.com*

**Re: Comments on the Draft 2020 Urban Water Management Plan**

Dear Mr. Wong,

On behalf of the signatories listed below, we submit the following comments and recommendations on the Los Angeles Department of Water & Power's (LADWP) draft 2020 Urban Water Management Plan (UWMP).

The vision set forth by Mayor Garcetti in 2014 through Executive Directive 5 and extended through the Green New Deal Sustainability pLAN in 2019 (the "Sustainability pLAN") provides the goals and outcomes for the transformation of Los Angeles' water resources. LADWP's UWMP identifies how the City will achieve these goals.

While the draft UWMP, as written, highlights the tremendous strides made to date to establish the City of Los Angeles as a leader on water conservation and enhancing local water supplies, it does not deliver on the Sustainability pLAN's mandate for making Los Angeles truly water secure and climate resilient.

The UWMP is the blueprint that will guide Los Angeles' future actions and investments. For this reason, the UWMP needs to be improved so that it aligns with the City's Sustainability pLAN, especially regarding:

- Water efficiency
- Water recycling and distributed stormwater capture
- Water and climate equity
- Reducing LA's dependence on imported water supplies from the Eastern Sierra as well as from the Metropolitan Water District of Southern California (MWD).

**1. Los Angeles is nearly 15 years ahead of schedule in achieving Sustainability pLAN 2035 targets for reducing LA's water use.**

The UWMP affirms significant water efficiency improvements achieved since 2014 by Los Angeles. LA's 2020 per capita water use is 106 gallons daily (GPCD), down from 133 GPCD in 2014. As of today, LA has effectively met its *potable*<sup>1</sup> 2025 GPCD target and is on track to

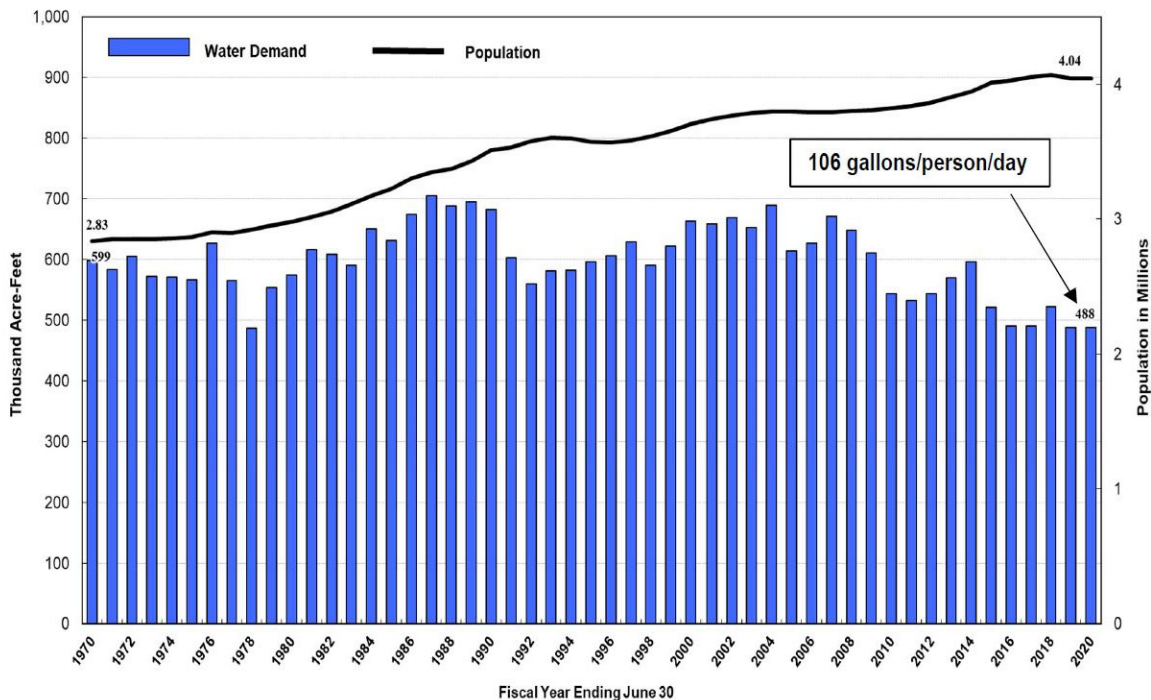
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<sup>1</sup> The UWMP should provide clear information on how the GPCD targets are to be calculated. The Sustainability pLAN's goal for reduced *potable* per capita water use is a different calculation from *total* per capita water use is a

surpass its 2035 *potable GPCD* target within the next few years. LADWP must continue this momentum as Los Angeles can still do much more to reduce unnecessary water waste through efficiency improvements.

Today Los Angeles is using less water (potable and recycled combined) than it did 50 years ago, despite the City’s population growing by more than 1.2 million people during that period (see Exhibit 3A, 2020 Draft UWMP).

**Exhibit 3A  
Historical City of Los Angeles Water Use**



The benefits to Los Angeles of these water efficiency improvements are significant:

- LADWP’s water rates are significantly lower than they would have been without water conservation (AWE, 2018). Water efficiency is a major contributor to achieving LADWP’s and the City’s equity goals.
- LADWP’s water efficiency programs achieve significant energy savings and reduced greenhouse gas emissions at a cost that is competitive with the City’s investment in its energy efficiency programs (Spang, 2020).
- Los Angeles reduces urban runoff and improves water quality by implementing distributed stormwater capture projects, consistent with the requirements of the 2016

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different calculation from *total* per capita water use. Note that all recycled water, except direct potable reuse, is excluded from potable water use.

Enhanced Water Quality Program (LARWQCB, 2016).

- National research documents the significant job and economic growth benefits that accrue from investments in water efficiency (AWE 2017). Southern California studies have evaluated the benefits of water efficiency and have published similar conclusions (Economic Roundtable, 2011).

In 2018, the UCLA Institute of the Environment and Sustainability estimated that lowering LA's per capita water demand from 133 to 75 GPCD by 2035 could generate an estimated \$7–\$10 billion in economic benefits to Los Angeles (UCLA, 2018).

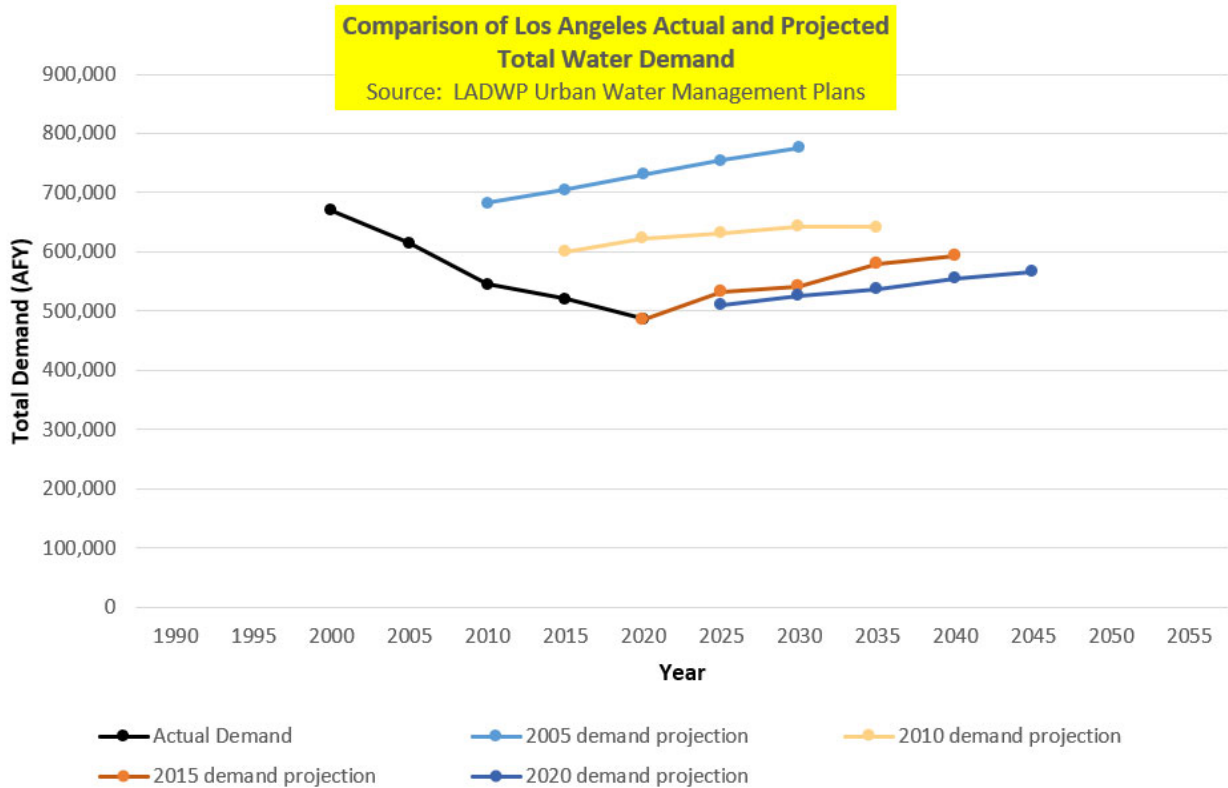
Today, Los Angeles is better prepared for drought than it was before 2014. This is of critical importance as Los Angeles and all of California once again face critically dry conditions. Every drop of conserved water means that existing water supplies can be stretched that much further, providing greater sustainability and water reliability as our communities adapt to climate change.

Consider where LA would be today if the City was using water at its 1990 level of efficiency of 182 GPCD: LA's water use would exceed an eye-popping 800,000 acre-feet per year (AFY). To meet this demand, LA would need another 350,000 AFY of costly water supplies. Water efficiency and conservation have proven to be LA's least expensive and most climate-resilient sources of new water.

## **2. The draft 2020 UWMP overstates future water demand.**

The UWMP forecasts that LA's water demand will rise by a total of nearly 80,000 acre-feet between 2020 and 2045. This forecast is inconsistent with actual water use data, which shows that LA's demand has declined continuously over the past two decades due to improved water efficiency and other measures.

Using LADWP's data, the graphic below compares actual Los Angeles water use with UWMP water demand projections made in 2005, 2010, 2015, and 2020. LADWP has consistently underestimated water conservation potential and overestimated water demand in the past three UWMPs.



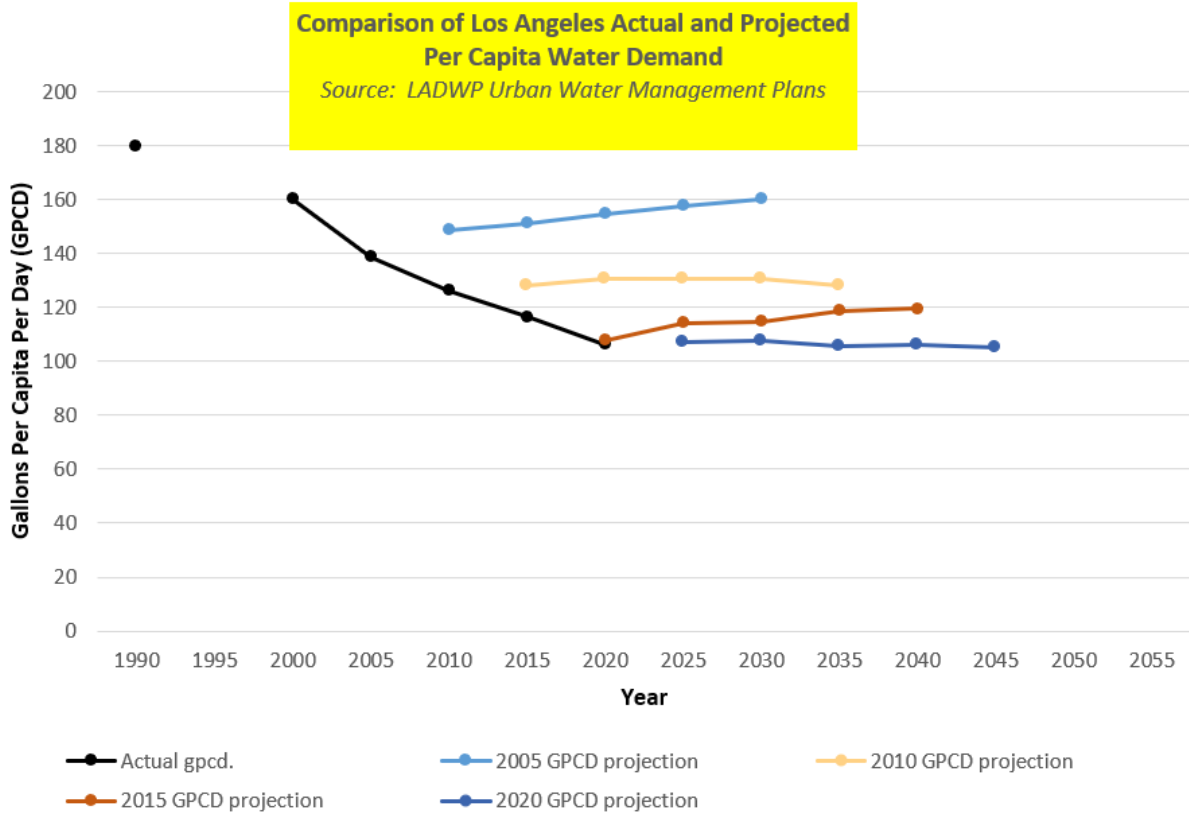
The following assumptions made in the draft UWMP contribute to LADWP’s overestimate of future water demand:

- The UWMP places an arbitrary cap on future water efficiency improvements.

The UWMP states that “LADWP’s water efficiency goal is to achieve 100 GPCD by 2035 and to maintain this usage through 2050” (UWMP 2-7, emphasis added). This goal is inconsistent with the spirit of the Sustainability pLAN, which anticipated that the City could target better levels of water efficiency below the 100 GPCD goal.

Because LADWP assumes that future per capita water use will remain flat for the next 25 years as population increases, future water demands are forecasted to rise by 80,000 AFY by 2045. This projected trend is inconsistent with the last two decades of water use experience by Los Angeles.

Using LADWP’s data, the graphic below compares the actual per capita water use with UWMP per capita water use projections made in 2005, 2010, 2015 and 2020. Despite the current hot and dry weather, Los Angeles appears roughly on track to achieve 100 GPCD within the next few years.



- The UWMP assumes that LA will achieve less than 12,000 AFY of new “additional” water savings between 2025 and 2045.

LADWP’s arbitrary cap on future water efficiency improvements is reflected in the UWMP’s estimate of the “additional conservation savings” that are calculated to offset future water demand in the UWMP.

The UWMP Exhibit 2M, shown below, identifies nearly 145,000 acre-feet of “additional conservation savings” that LADWP expects to achieve between 2025 and 2045. However, the majority of these savings are not new; they comprise water saved between 2014 and 2020. As explained in the note below Exhibit 2M, these savings come from a combination of water savings “retained” from earlier years and future active and passive water conservation.

The UWMP water savings as presented by LADWP are cumulative. The net additional water saved between 2025 and 2045 is projected to be less than 12,000 AFY. The result is that these assumptions inappropriately inflate the City’s projected future water needs.

**Exhibit 2M**  
**LADWP Water Demand Projections by Sector**

Year	Single-family	Multi-family	Commercial/Government	Industrial	NRW	Additional Conservation Savings*	Total
2025	228,529	192,727	156,407	13,651	51,321	133,133	509,501
2030	233,366	205,728	157,341	12,902	50,826	133,506	526,658
2035	237,297	219,798	158,236	12,171	51,334	142,688	536,148
2040	242,761	233,602	159,030	11,418	51,026	143,351	554,486
2045	246,779	244,853	157,680	10,503	50,687	144,752	565,751

\*Additional Conservation Savings includes projected future active and passive savings and additional retained passive savings. Details on future active and passive savings are provided in Chapter 3, *Water Conservation*.

- The UWMP appears to assume that LA’s water demand will rebound between 2020 and 2025 to a higher, less efficient level of water use.

As presented, the UWMP forecasts that the City’s population will increase by 148,000 people and its water demand will increase by 21,000 AFY over the next five years. This large increase in water use is equivalent to assuming that all new people will use roughly 130 gallons per person per day, not 106 gallons assumed as the per capita use of LA’s current population.

Effectively, and without explanation, LADWP is projecting that the City will become less water efficient over the next few years, rolling back a significant share of the City’s current water savings achievements. This assumption results in an inflated 2025 starting point for the UWMP’s water demand projections.

- The UWMP relies on water use factors that are likely out of date.

The UWMP states that water use factors were obtained from MWD water forecast modeling tools (UWMP, 2-6). Recently MWD recognized that past use of this forecasting tool has resulted in inflated water demand projections.

MWD is currently evaluating how to improve the forecast model, but two key assumptions stand out as potentially impacting the accuracy of LADWP’s UWMP demand forecasts: (1) the failure of the model to appropriately account for increased density of new growth (which is accompanied by significantly reduced outdoor water use<sup>2</sup>); and (2) the model’s assumption that 50% of new development will NOT comply with local Model Water Efficiency Landscape Ordinances because they are not adequately enforced by cities (MWDSC, 2020) (MWD, p. 2-9).

- The UWMP assumes no meaningful reductions in non-revenue water usage.

<sup>2</sup> Density was identified in MWD’s 2010 UWMP as a key variable in reducing demand (see MWD 2010 UWMP, Appendix A.28). Housing density estimates used in the 2010 MWD-MAIN models were based on 1993 land use and housing data provided by SCAG and SANDAG. These modeling assumptions were not updated in MWD’s 2015 Integrated Resources Plan (see 1/7/2016 technical comment letter from Joe Grindstaff to Deven Upadhyay). It is unclear whether MWD made updates as of 2020.

The UWMP states that its percentage of non-revenue water loss (unbilled water that includes distribution system leaks) will decline by 1% over the next 25 years UWMP, 2-8). However, LADWP does not expect to substantially reduce this volume. As shown in Exhibit 2M (column labeled NRW), the non-revenue water remains about 51,000 AFY. The percentage decline appears to be related to LADWP's assumption that total water demand will increase while non-revenue water doesn't change.

### **3. Future continued water efficiency improvements are achievable, necessary and should be factored into the UWMP demand projections.**

Seven years ago, the Mayor's Sustainability pLAn's 2035 water conservation goals were considered ambitious. As of 2021—15 years early—they have almost been met. This trajectory, although the product of the Mayor's vision, is not unique to Los Angeles. Dramatic declines in urban water use over the past 20 years are a well-documented nationwide trend that is expected to increase based on current water efficiency standards, technologies, and additional investments in conservation, landscape transformation, and distributed stormwater capture projects (Abraham, 2020; Cooley 2020; Public Policy Institute of California 2019).

LADWP should develop a more realistic demand forecast that is based on current realities and trends, and advances the Mayor's goal of climate resilience. Research published in 2018 by the UCLA Environment and Sustainability Program suggests that Los Angeles should aim at achieving water use level of 75–80 GPCD by 2035 (UCLA, 2018 p. 105). UCLA estimates that improving LA's water efficiency from its 2017 level of 104 GPCD to 75 GPCD by 2035 would reduce LA's water needs by 200,000 AFY, from 536,000 AFY to 365,000 AFY (UCLA, 2018 p. 61).

### **4. The UWMP does not account for new local water supplies being developed to achieve the City's Sustainability pLAn goals.**

The UWMP describes the City's many initiatives to expand its groundwater, stormwater capture and recharge, and recycled water resources, consistent with the goals of the Sustainability pLAn, LADWP's 2015 Stormwater Capture Master Plan, the 2016 Los Angeles Basin Study for Conservation, and the newly formed Safe Clean Water Program. However, LADWP's future water supply forecasts do not reflect the water produced from these important projects.

For example, Operation Next is the City's flagship potable reuse project, yet NO water supplies from this project are included in the projections, not even by 2045—ten years after Operation Next is expected to be fully operational. Effectively this means that the City's goal to use 100% of its recycled water by 2035 is not part of LADWP's official 2020 UWMP water supply projections. The UWMP states that staff will provide future updates as the project is

constructed.<sup>3</sup> However, preliminary estimates of the expected water produced by Operation Next should be incorporated into the UWMP supply forecasts.

Similarly, LADWP should quantify and incorporate the water supply created through its water conservation programs and the Safe Clean Water Program. Stormwater projects have already been funded through this program, are under construction, and more annual funding will become available. However, the UWMP merely states that these project will “increase water supply” without quantification (UWMP, p. 6-28). Given the realities of climate change, LADWP should increase its stormwater capture goal to be consistent with the “aggressive capture potential” of 178,000 AFY shown in Exhibit 6F (UWMP, p. 6-11).

### **5. The UWMP does not adequately address water affordability and equity concerns for LA’s disadvantaged communities.**

According to recent studies some of the best opportunities for water efficiency continue to be in lower-income neighborhoods where the housing stock and water pipes are older and uptake of rebates has not been as high (AWE, 2017). These studies also document the value of conservation programs to improving water affordability within disadvantaged communities (AWE, 2019, p. 9).

In the 1990s many of Los Angeles’ community based organizations (CBOs) partnered with LADWP to install low-flow toilets within their communities. CBOs are viewed as trusted community members and have had significant success in implementing conservation programs. These CBO-led initiatives also generated jobs and revenue for community members. By 2001, the City had installed over one million toilets.

A 2020 version of these programs should be developed that similarly invest in efficiency projects that make water services more affordable for low-income residents, create jobs and job training programs and ensure that LADWP’s rebate programs are accessible to and fully benefit Los Angeles’ low-income communities. This is a particularly pressing need given the health and economic impacts of COVID-19 on these communities. This work would be consistent with LADWP’s expanded Equity Metrics Data Initiative, where recent feedback emphasized the need to for more involvement of CBOs in the design and implementation of these programs, along with improved customer segmentation to better understand the characteristics of those who have trouble accessing LADWP’s programs and services.

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<sup>3</sup> The California Water Code 10631(b) requires water suppliers to identify and quantify, to the extent practicable, the existing and planned sources of water available in five year increments to 20 years or as far data is available. See the 2020 UWMP Guidebook, p. 6-4, by the California Department of Water Resources: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/UWMP-Guidebook-2020---Final-032921.pdf>.



## **6. The UWMP does not achieve Los Angeles' goal to obtain 70% of its water from local sources.**

One of the transformative water management goals in the Sustainability pLAN is to obtain 70% of the City's water supplies from local sources, defined as conservation, groundwater, and recycled water, by 2035. This goal directly addresses the expected impacts of climate change on the City's imported water supplies including a shrinking snowpack, warmer temperatures, and more extreme droughts and rainfall events. The imported water supply target is 30%, provided by a combination of Los Angeles Aqueduct (LAA) deliveries and MWD purchases.

Using the UWMP data, LADWP estimates that 46% of the City's water supply will be locally sourced (including conservation), while 54% will come from imported water supplies. By 2045, the percentage of the City's imported water increases to 57%—in other words, Los Angeles becomes more dependent on imported water, not less.

One reason for this discrepancy is that LADWP does not count the recycled water produced from Operation Next, described earlier, nor do they account for distributed stormwater capture. Another significant factor is the artificial cap LADWP places on future conservation, also described earlier. But in the end, LADWP's fundamental assumption is that the City will continue to rely on climate-vulnerable imported water supplies from the Eastern Sierra and MWD for the majority of its water.<sup>4</sup>

## **7. LADWP has the opportunity to do more through local water supply development and conservation to significantly reduce LA's dependence on imported water from the Eastern Sierra as well as from MWD.**

It is time to consider a new joint integrated water resources management plan for the Los Angeles Aqueduct.

Local and Tribal governments in Mono and Inyo Counties share the same concerns as Los Angeles regarding the impacts of climate change on their environment and communities.

The future of our two watersheds are intertwined, connected by the physical structure of the Los Angeles Aqueduct. LADWP's diversions will continue—the City's choice is how these diversions will be managed. The Eastern Sierra has already experienced environmental and economic harm due to these diversions. Climate change is expected to intensify these impacts.

But climate change does not have to result in increased conflict between our watersheds. As highlighted in the UWMP, there is more than enough water between the two regions, particularly with the construction of Operation Next, to free LADWP from fighting and losing endless rounds of court and regulatory battles. LA's wealth of local water supplies enables the two regions to

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<sup>4</sup> The UWMP maintains, with minor adjustments for climate change, LAA diversions in the 185,000–190,000 AFY range between 2025-2045. MWD purchases are reduced by 50% from the 2014 baseline, but then are similarly assumed to plateau in the 158,000-220,000 AFY range.

work together to shape a new climate-resilient future, one in which both achieve water reliability.

We have done this before. In the 1990s Los Angeles recognized its connection with the Eastern Sierra and pledged water efficiency and recycled water improvements to help provide the water needed to save Mono Lake. Through the efforts of the Mono Lake Committee, the State of California and the Federal Government made over \$120 million available to LADWP to invest in conservation and water recycling as part of developing a shared solution.

Los Angeles and the Eastern Sierra can do this again. Together, we have the opportunity to overcome more than 100 years of history by developing an integrated water resources management plan for the Los Angeles Aqueduct that achieves more flexibility, water reliability and ecological resilience for both regions as we cope with the impacts of climate change.

In conclusion, the UWMP needs to meaningfully implement the City's Sustainability pLAN and deliver on its promise of making the City truly water secure and climate resilient. To that end we submit the following recommendations:

1. Provide a more realistic future water demand scenario that retains and builds upon Los Angeles' existing water efficiency achievements and helps to secure the Green New Deal Sustainability pLAN goal of obtaining 70% of the City's water supply from local sources.
2. Remove LADWP's per capita water use efficiency "cap" of 100 gallons, establish a new, bold conservation target to achieve 75–80 gallons per capita by 2045 and address other water use factors that inappropriately inflate forecasted water demands.
3. Count local water supplies created by Operation Next in the UWMP supply scenario, recognizing these are estimates. These new local recycled water supplies are an essential part of LADWP's commitment to obtain 70% of its water from local sources.
4. More fully quantify local water supplies to be created by the Stormwater Capture Master Plan and Safe Clean Water Program, including all planned and anticipated stormwater capture/reuse projects, regardless of whether such projects are being led by LADWP or other City Departments (e.g. LASAN), outside agencies (e.g. LAUSD) or other third-party groups, including NGOs.
5. Build on and expand Los Angeles' and LADWP's existing programs addressing equity and affordability issues. Increase Los Angeles CBO involvement in the design and implementation of water efficiency, distributed stormwater capture, and conservation projects and programs. Augment outreach and funding for rental housing conservation improvements and provide more detail on tracked metrics.
6. Commit to the development of a sustainable Integrated Water Resources Management Plan for the Los Angeles Aqueduct in partnership with the Eastern Sierra Tribes, local communities and governments and conservation organizations. There are opportunities for shared stewardship and efficiency improvements in both watersheds that are more cost-effective and environmentally beneficial than continued litigation and will achieve a more

climate-resilient and sustainable future for both the Eastern Sierra and Los Angeles.

As California confronts another serious drought, we cannot be complacent about the climate-related water challenges facing our communities. LA's Green New Deal Sustainability pLAN needs to be fully implemented in every aspect of City planning.

LADWP's 2020 Urban Water Management Plan needs to reflect the City's commitment to building a climate-resilient water future. This is the time for LADWP and this UWMP to be as bold—if not even more audacious—as Mayor Garcetti's Sustainability pLAN. We look forward to working collaboratively with you to make this water future a reality.

For questions regarding these comments please contact Bartshé Miller, Mono Lake Committee Eastern Sierra Policy Director, at (760) 647-6595 x121 or [bartshe@monolake.org](mailto:bartshe@monolake.org).

Sincerely,



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